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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/897,222	07/02/2001	Toshiya Mori	NAK1-BP24	9035
21611	7590	12/19/2005	EXAMINER	
SNELL & WILMER LLP 600 ANTON BOULEVARD SUITE 1400 COSTA MESA, CA 92626			LAYE, JADE O	
			ART UNIT	PAPER NUMBER
			2617	

DATE MAILED: 12/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/897,222

Applicant(s)

MORI, TOSHIYA

Examiner

Jade O. Laye

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-70 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-70 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/4/01</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

I. The information disclosure statement (IDS) submitted on 10/4/01 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement has been considered by the examiner.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

II. Claims 1-70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eldering (US Pat. No. 6,615,039) in view of Mori et al. (EP No. 0827340).

As to Claim 1, Eldering discloses a broadcasting apparatus which transmits programming and associated ads. The system will transmit data which specifies the reproduction time of the

programming data and associated ads. In addition, the ads (i.e., first or second broadcasting data) can be sent in advance of their reproduction time period (i.e., from a specific time). (Col. 4, Ln. 15-28; Col. 8, Ln. 23-41; Col. 10, Ln. 5-56; Col. 11, Ln. 43-53; Col. 12, Ln. 15-39). Moreover, it is inherent that this time period be a predetermined time period because the system must transmit said data before it is displayed. But, Eldering fails to disclose the remaining limitation of Claim 1. However, within the same field of endeavor, Mori discloses a similar system which repeatedly broadcasts programming data. (Abstract; Col. 6, Ln. 38-50; Col. 14, Ln. 1-8). Accordingly, it would have been obvious to one having ordinary skill in this art at the time of Applicant's invention to combine the systems of Eldering and Mori in order to provide a system which enables a large number of terminal apparatuses to receive a broadcast wave.

[Note: The Mori reference is available under 103(a) despite the common assignee (103(c)) because it is available under 102(a). The 103(c) prohibition only applies to references which could only be applied under 102(e), (f), or (g).]

As to Claim 2, said transmitted ads could be distributed in any order. Therefore, for example, Ad #1 (i.e., first broadcast data) could be transmitted before Ad #2 (i.e., second broadcast data) and Ad#2 could be displayed before Ad #1. Accordingly, the combined systems of Eldering and Mori disclose all limitations of Claim 2.

As to Claim 3, it is inherent that both the first and second broadcast data be transmitted on a predetermined bandwidth (e.g., a channel is a predetermined bandwidth). It would also be inherent that any given ad would be transmitted until a specific time (i.e., the end of its transmission) and subsequently, another ad would be transmitted. Accordingly, the combined systems of Eldering and Mori disclose all limitations of Claim 3.

The limitations of Claim 4 are encompassed within the limitations of Claim 2. Thus, it is analyzed and rejected as discussed therein.

As to Claim 5, the combined system is also capable of sending one ad (i.e., second broadcast data) or sending multiple ads (i.e., first and second broadcast data) on a predetermined bandwidth. (citations used under Claim 1). Accordingly, the combined systems of Eldering and Mori disclose all limitations of Claim 5.

As to Claim 6, the combined system is also capable of sending programming data one after the other (as discussed under claim 5). Accordingly, the combined systems of Eldering and Mori disclose all limitations of Claim 6.

As to Claim 7, Mori further discloses the system comprises a cache which is which caches broadcasting data, thus it is inherent some form of “cache instruction” be transmitted. (Col. 2, Ln. 23-39; Col. 15, Ln. 25-34; Col. 19, Ln. 40-49). Moreover, the system of Eldering further discloses the systems sends data specifying when the broadcasting data is to be inserted. (citations of Claim 1). In instances when the data is sent in real-time, the insertion data will be sent during a reproduction time period. Accordingly, the combined systems of Eldering and Mori disclose all limitations of Claim 7.

As to Claim 8, it is inherent the combined system of Claim 7 reproduce the cached data after the data has been received. In instances when the data is not received, the system will continue to display the data previously cached. The remaining limitation is encompassed within the limitations of Claim 7. Accordingly, the combined systems of Eldering and Mori disclose all limitations of Claim 8.

As to Claim 9, the system of Mori further teaches the use of a memory which stores image signals. (cited under Claim 1). The remaining limitations of Claim 9 mirror those of Claim 7. Accordingly, the combined systems of Eldering and Mori disclose all limitations of Claim 9.

As to Claim 10, Eldering further discloses the use of a multiplexer. (Fig. 5). The remaining limitations are encompassed by the limitations of Claims 1, 2, and 5. Accordingly, the combined systems of Eldering and Mori disclose all limitations of Claim 10.

Claims 11, 12, and 13, mirror the language of Claims 2, 3, and 4, respectively. Thus, each is analyzed and rejected as discussed therein.

Claims 14, 15, and 16 mirror the language of Claims 5, 6, and 7, respectively. Thus, each is analyzed and rejected as discussed therein.

Claims 17 and 18 mirror the language of Claims 8 and 9, respectively. Thus, each is analyzed and rejected as discussed therein.

As to Claim 19, Eldering further discloses the system will acquire various programming data (i.e., first or second data) and associated data (as discussed under Claim 1) via a repetitive multiplexer (Fig. 5 & Claim 1), but fails to disclose the remaining limitations of Claim 19. However, Mori further discloses the use of a judging means which can determine if the cache has sufficient room to store the incoming data (essentially, the available space in the cache represents a certain predetermined time period). If the incoming data requires more cache space than available, the system will transmit frames of the program along with related data (i.e., navigation info, program descriptors, etc). The Examiner broadly interprets the frames to denote first or second program data, while the related data refers to first or second additional data.

Thus, the elements of subelement (a) are met because the system could transmit the frames along with its related data up until any “specific time,” transmit other frames and related data from that specific time, and transmit frames and related info during its reproduction time. (Col. 7, Ln. 10-41; Col. 23, Ln. 4-32).

As to subelement (b), if the cache of Mori contains enough space, the system will transmit the stream and said related data. Thus, broadly interpreted, the combined system will transmit the stream (i.e., second program data) and its related info (i.e., second additional data) until a specific time, transmit additional streams and related info during the broadcast time of other data (i.e., second additional/program data along with first program data), or transmit the other programming data along with its related data during its broadcast time. (Col. 7, Ln. 10-41; Col. 23, Ln. 4-32). Accordingly, the combined systems of Eldering and Mori disclose all limitations of Claim 19.

The limitations of Claim 20 are combinations of limitations from Claims 3 and 19. Regardless of how the various programming data are transmitted (e.g., first data with second data, first additional data with second data), the Examiner’s interpretation of first and second programming data (i.e., any form of program data) and first and second additional data (i.e., any form of related program data—which encompasses program data) will read upon Applicant’s manipulation of these terms. Accordingly, the combined systems of Eldering and Mori disclose all limitations of Claim 20.

The limitations of Claim 21 are combinations of limitations from Claims 19 and 20. Moreover, the Examiner takes Official Notice that, at the time of Applicant’s invention, the use of additional bandwidth (i.e., adding bandwidth) was notoriously well known in this art.

Accordingly, it would have been obvious to one having ordinary skill in this art at the time of Applicant's invention to modify the combined system of Eldering and Mori in order to provide a system which uses bandwidth more efficiently. Accordingly, the combined systems of Eldering and Mori disclose all limitations of Claim 21.

The limitations of Claim 22 are encompassed within the limitations of Claim 19. Moreover, since the system repeatedly transmits data, it could transmit Ads, streams, and related info during the broadcasting period of any program. Accordingly, the combined systems of Eldering and Mori disclose all limitations of Claim 22.

As to Claim 23, it is inherent the system calculate the time period needed to cyclically broadcast data. Any variant on how to calculate this time period would be an obvious design choice. Accordingly, the combined systems of Eldering and Mori disclose all limitations of Claim 23.

As to Claim 24, the Examiner takes Official Notice that, at the time of Applicant's invention, updating of broadcast data in real-time was notoriously well known in this art. The remainder of the limitations mirror those of Claim 19. Accordingly, it would have been obvious to one having ordinary skill in this art at the time of Applicant's invention to further modify the combined system of Eldering and Mori, thereby creating a system which provides broadcasting data in real-time.

The limitations of Claim 25 are encompassed within the limitations of Claims 20 and 24. Thus, it is analyzed and rejected as discussed therein.

The limitations of Claim 26 are encompassed within the limitations of Claim 21 and 25. Thus, it is analyzed and rejected as discussed therein.

The limitations of Claim 27 are obvious variants of the limitations of Claims 19, 22, and 24. Thus, it is analyzed and rejected as discussed therein.

The limitations of Claim 28 mirror those of Claim 23. Thus, it is analyzed and rejected as discussed therein.

The limitations of Claim 29 are encompassed within those of Claims 11 and 19. Thus, it is analyzed and rejected as discussed therein.

The limitations of Claim 30 are only minor and obvious manipulations of the limitations of Claim 24. Accordingly, the combined systems of Eldering and Mori disclose all limitations of Claim 30.

The limitations of Claim 31 mirror those of Claim 23. Thus, it is analyzed and rejected as discussed therein.

The limitations of Claim 32 are inherent in view of Claim 19. Accordingly, the combined systems of Eldering and Mori disclose all limitations of Claim 32.

The limitations of Claim 33 are obvious variants of Claims 1, 10, 11, 19, and 29. Thus, it is analyzed and rejected as discussed therein.

The limitations of Claim 34 are obvious variants of Claims 3, 11, and 19. Thus, it is analyzed and rejected as discussed therein.

The limitations of Claim 35 are obvious variants of Claims 21 and 34. Thus, it is analyzed and rejected as discussed therein.

The limitations of Claim 36 are obvious variants of Claims 1 and 33. Thus, it is analyzed and rejected as discussed therein.

The limitations of Claim 37 are encompassed within those of Claim 34. Thus, it is analyzed and rejected as discussed therein.

The limitations of Claim 38 are obvious variants of limitations from Claims 19, 33, and 36. Thus, it is analyzed and rejected as discussed therein.

The limitations of Claim 39 mirrors those of Claim 34. Thus, it is analyzed and rejected as discussed therein.

The limitations of Claim 40 mirrors those of Claim 35. Thus, it is analyzed and rejected as discussed therein.

The limitations of Claim 41 are inherent in view of Claim 1. Thus, it is analyzed and rejected as discussed therein.

The limitations of Claim 42 mirror those of Claim 7. Thus, it is analyzed and rejected as discussed therein.

The limitations of Claim 43 are an obvious variant of Claim 8. Thus, it is analyzed and rejected as discussed therein.

The limitations of Claim 44 are an obvious variant of Claim 9. Thus, it is analyzed and rejected as discussed therein.

The limitations of Claim 45 are obvious variants of Claims 7 and 10. Thus, it is analyzed and rejected as discussed therein.

The limitations of Claim 46 are inherent in view of Claims 7 and 8. Thus, it is analyzed and rejected as discussed therein.

The limitations of Claim 47 are obvious variants of Claim 9. Thus, it is analyzed and rejected as discussed therein.

The limitations of Claim 48 are obvious variants of Claims 1 and 10. Thus, it is analyzed and rejected as discussed therein.

The limitations of Claim 49 mirror those of Claim 10. Thus, it is analyzed and rejected as discussed therein.

The limitations of Claim 50 mirror those of Claim 33. Thus, it is analyzed and rejected as discussed therein.

The limitations of Claims 51 and 52 mirror those of Claims 42 and 45, respectively. Thus, each is analyzed and rejected as discussed therein.

The limitations of Claims 53, 54, and 55 mirror those of Claims 1, 10, and 33, respectively. Thus, each is analyzed and rejected as discussed therein.

The limitations of Claim 56 are obvious variants of Claims 1 and 7. Thus, it is analyzed and rejected as discussed therein.

The limitations of Claim 57 are obvious variants of Claims 7 and 10. Thus, it is analyzed and rejected as discussed therein.

The limitations of Claim 58 are encompassed within Claim 19. Thus, it is analyzed and rejected as discussed therein.

The limitations of Claims 59, 60, and 61 are encompassed within Claims 19, 23, and 23, respectively. Thus, each is analyzed and rejected as discussed therein.

The limitations of Claims 62 and 63 are obvious variants of Claim 24. Thus, it is analyzed and rejected as discussed therein.

The limitations of Claims 64-66 are encompassed within Claim 23. Thus, each is analyzed and rejected as discussed therein.

The limitations of Claim 67-70 are encompassed within Claims 41. Thus, each is analyzed and rejected as discussed therein.

Conclusion

III. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Walters et al (US Pat No. 5,440,334) discloses a cyclic distribution system.
- b. Inoue et al (US Pat. No. 6,157,948) discloses a similar system.
- c. Takao et al (US Pat. Pub. No. 2001/0034787) discloses a similar transmission system.
- d. Mori et al (US Pat. No. 6,191,782) discloses a cache system.
- e. Hirai et al (US Pat. Pub. 2002/0010937) discloses a similar data broadcasting system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jade O. Laye whose telephone number is (571) 272-7303. The examiner can normally be reached on Mon. 7:30am-4, Tues. 7:30-2, W-Fri. 7:30-4.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiner: Jade O. Laye
December 9, 2005.


CHRIS KELLEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800